

THE INNOVATION CATALYST

2020

INNOVATING THROUGH THE PANDEMIC: MAKE SPACE FOR YOUR MENTAL HEALTH

The COVID-19 pandemic has upended life in the United States, bringing with it added stress and worry. According to survey data from the Centers for Disease Control and Prevention (CDC), "symptoms of anxiety disorder and depressive disorder increased considerably in the United States during April–June of 2020, compared with the same period in 2019." In fact, CDC survey data shows that 40 percent of U.S. adults indicated struggles with mental health or substance abuse, and 25 percent of adults ages 18-24 had seriously considered suicide in the past month.

"Everyone has a different experience of it, and it's important to remember that there are so many layers to people's lives," says Ashley Prueitt, a psychologist at NASA's Armstrong Flight Research Center. "Even though we're all going through the same thing as a country, it's different for each family."

As the pandemic lumbers on and the country shoulders the burden of continued political upheaval and racial injustice, the Strategic Partnerships Office (SPO) asked Prueitt for her advice on coping with feelings of sadness, loneliness, stress, and other challenges. SPO is known for encouraging Goddard innovators to report their new technologies, but we also want to encourage you to take care of your wellbeing. Whatever you're going through, you're not alone, and we'll share some additional resources at the end of the article.

DEALING WITH STRESS

Whether you're working fulltime from home or going on center, it's likely that your normal routine has experienced a jarring shift. Each scenario creates its own unique stressors – for people who live alone, the constant isolation can bring feelings of loneliness. Parents with kids at home are shouldering their work responsibilities on top of caring for their children and helping them with remote learning. Work and family responsibilities merge in overwhelming ways.

For those going on center, safety protocols and new admission requirements are constant reminders of the pandemic. Your usual seasonal allergies have suddenly become a foreboding omen. The stress can feel unescapable.

"Some people feel like they're constantly 'on' and can't ever disconnect from work because they're working and living in the same space," Prueitt says. "We don't work 100 percent of the time when we're going into a workplace, but there's this feeling of obligation with working from home, and it's creating mental drain."

No matter what your specific situation looks like, this year has produced challenges that didn't exist last year or has exacerbated pre-existing issues. The slow crawl of the pandemic can make it difficult to even recognize that you aren't OK.



Mental Mission is a new SPO initiative that encourages innovators to prioritize their mental health during these challenging times.



INNOVATING THROUGH THE PANDEMIC: MAKE SPACE FOR YOUR MENTAL HEALTH (cont'd)

CHECKING IN

Prueitt says everyone has a different "normal" that applies to them.

"If you have someone who's normally outgoing and they suddenly act more reserved, that could be their indicator," she adds.

To check in with yourself, you can assess your own behaviors and moods. Ask yourself, "What are my energy levels like? Am I making time for self-care and things I enjoy?"

It's also beneficial to foster a culture of checking in with people around you. Your friends, family, or coworkers might notice you becoming more isolated or acting more irritable even when you're unaware of the shift.

"It's important that we watch out for each other," Prueitt says. "Ask people how they're handling things or if they're getting time away from their computer."

MAKING CONNECTIONS

While coworkers can play an important role in making mental health a part of everyday conversation, Prueitt says it's also important for people in management roles to show that they prioritize mental health. By mentioning Goddard's Employee Assistance Program (EAP) and talking about times they've used it themselves, leadership can normalize seeking help.

"It shows people that it's OK to need support," Prueitt adds.

She says that around 80 percent of people who use the EAP are referred by a coworker or supervisor who has used the program before and found it helpful. If you've noticed a coworker who's struggling and you don't know how to help them, you can start by just reaching out and asking if they're OK.

"Especially when we're teleworking, we get busy and focus on the people we have to talk to," Prueitt says. "In the workplace, we would naturally run into someone in the hallway or the parking lot, but that doesn't happen anymore unless you're intentionally making those connections."

It may feel strange because you have to schedule those moments, but just a single conversation with someone can have positive benefits for you and them. Prueitt suggests putting reminders on your calendar to schedule quick coffee dates to recreate those casual workplace moments.

Although it might feel awkward or forced at first, it's unlikely you'll regret taking a few minutes to just connect with someone, and it reminds people that they are in your thoughts.

"It can help to know someone cares enough to reach out," Prueitt says.

GETTING HELP

If you find yourself struggling to get through the day, it can be hard to muster the energy to seek solutions. Prueitt says sometimes taking small steps can help, such as looking online for resources that don't involve speaking to anyone. Inside NASA has a "Health 4 Life" website with articles about physical and mental health, including 10 tools for better managing stress, how to navigate grief at work, and ideas for safe ways to connect during the holiday season.

NASA has additional resources through its Employee Assistance Program, a free resource for civil servants to connect with a clinician about a wide variety of topics, from anxiety and depression to substance abuse and family relationship issues. The website lists additional resources for Goddard contractors, who should also check with their employers to see what mental health services they provide.

Goddard has a Microsoft Teams support group for childcare, and NASA has two additional support groups on Microsoft Teams centered on managing stress and loneliness during telework and eldercare.

Finally, if you are having suicidal thoughts or need emotional support, contact the <u>National Suicide Prevention Lifeline</u>. You matter, and there are options out there to help you.



SPO will continue to include mental health reminders and tips in upcoming issues of The Innovation Catalyst. If you have any advice to share, please submit ideas to amy.k.klarup@nasa.gov.

Illustration: NASA/Danielle Battle

RECOMMENDING TECHNOLOGIES FOR PATENT – A GUIDE FOR INNOVATORS

Updates to the patent decision process were implemented in the new fiscal year

In Fiscal Year 2021, the NASA Technology Transfer Program adopted a new patent decision process designed to eliminate redundancy and standardize practices across the agency when deciding which NASA technologies to pursue for patent application. Moving forward, this will change some interactions between SPO and Goddard innovators. Below, you can find the new process, including the parts that require innovator participation. As always, if you have any questions about your technology, please contact your assigned technology manager or send an email to techtransfer@gsfc.nasa.gov.

SPO PERFORMS TRIAGE OF REPORTED TECHNOLOGIES

When you submit your New Technology Report (NTR), SPO will run through a triage process to determine the commercial viability of the technology. They consider a number of factors, including Technology Readiness Level (TRL), benefits to market, current market interest, and overall commercial potential. Each NTR is examined by two reviewers. Once the triage is complete, each reviewer makes a recommendation for next steps. If the technology passes the triage phase, it moves into the screening portion of the process.

SCREENING AND ASSESSMENT

Acuity Edge, a NASA contractor based at NASA's Marshall Space Flight Center, performs a screening of the technology once it has passed the triage phase. At this point in the process, an Acuity Edge contractor will contact you to discuss the details of your technology. You may be

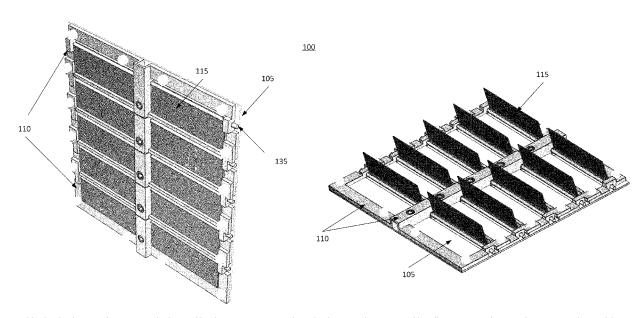
asked about public disclosures, the status of your employment as a contractor or civil servant, or details about how your technology operates.

SPO staff members continue to work with you and your technology while Acuity Edge performs an assessment in which they contact companies to further determine interest. SPO takes into account Acuity Edge's assessment when working with Goddard's Office of General Counsel (OGC) to make a final decision on whether or not the technology will receive a recommendation for patent application. OGC then works with you to file the patent application.

Additionally, Acuity Edge creates a "Technology Opportunity Sheet" or TOPS for short, which is a marketing tool that SPO and the agency can use to share information about your technology with potential licensees. You will have a chance to review the TOPS before it is published online.

ANY QUESTIONS? WE'RE HERE TO HELP!

Though this process has changed, SPO is still here to help guide you through any technology transfer related questions or concerns, so please don't hesitate to contact your assigned technology manager with any questions you may have. You can find your code assignment on page 10 of the October 2020 edition of the newsletter. SPO staff members also oversee license agreements and partnership agreements, and we welcome questions related to those activities, as well.



Goddard technologies with patents can be licensed by domestic companies. The technology seen here, invented by Allison Evans and patented in 2018, was licensed this year to Thermal Management Technologies.



Christmas חם

BEFORE THE HOLIDAYS, DON'T FORGET TO SUBMIT YOUR NTRS.

FOR QUESTIONS AND OTHER INFORMATION, EMAIL ROBERT.S.LEONARDI@NASA.GOV.

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TECH? TRANSFER

How much do you know about NASA technology transfer? Find out with our monthly quiz!

Which of these is NOT a technology category used in NASA Technology Transfer Program's patent portfolio?

A. Manufacturing

B. Artificial Intelligence

C. Health, Medicine, and Biotechnology

D. Optics

True or False: Since 1976, NASA has documented more than 2,000 spinoff technologies.

A. True

B. False

Q

What is the name of NASA's program for startup companies to license technologies with no up-front costs?

A. Launching Startups

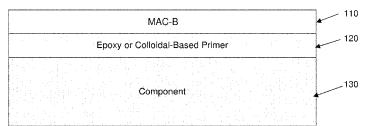
B. Tech Matchup

C. Tech for Small Business

D. Startup NASA

GUESS A PATENT DRAWING





CLUE ONE: This technology was invented by Goddard innovators Nithin Abraham, Mark Hasegawa, Sharon Straka, and John Petro.

CLUE TWO: The technology has applications in gas and water adsorption and the collection and containment of contaminants and volatiles.

CLUE THREE: Known as MAC for short, it received a patent in 2020.

+ WANT TO KNOW THE ANSWERS?

<u>Click here</u> for Tech Transfer Trivia and <u>here</u> for the Guess The Patent Drawing.

GET TO KNOW SPO VALERIYA NAKSHUN





POSITION: Marketing Specialist

HOW MANY YEARS
THEY'VE BEEN AT
NASA: 1 year and
4 months

ROLE AT SPO

My role is really nebulous because I'm involved across many projects, but most notably, I'm responsible for handling marketing to an internal audience, or "in-reach." This means you may have seen me doing virtual events where I've been the host and moderator of "Coffee Break" and "Goddard Reads." I'm also responsible for building marketing campaigns around important topics to our office, such as raising awareness of technology disclosure for NASA. I contribute to the newsletter, update the website, and come up with ideas to get you further engaged with our office. I'm working on a few new event series, which we hope will appear in early 2021, and I'm working to expand opportunities for Goddard's partnership with Tor Books.

FAVORITE PART OF WORK DAY

I love coming up with creative ideas for campaigns to reach out to Goddard innovators. Goddard is such a large center, and there is often a lot of information that needs to be disseminated. I find it very rewarding to figure out strategies that foster better communication. It's a win-win situation for all when the right message finds the person who needs it.

STAR WARS OR STAR TREK?

Star Wars!

VIDEO GAMES OR BOARD GAMES?

Board games. I love Catan!

BIGGEST PET PEEVE

I don't have any immediate ones that I can think of. It's not really a pet peeve, but I like bananas when they're slightly under-ripe. I can't stand even a small brown spot on a banana.

FAVORITE QUOTE OR JOKE

"My imagination gave me a dual life: I lived in my body, and at the same time lived a life no one could see." -Andre Dubus

MOST OBSCURE TALENT?

I learned metalsmithing for a year, learned a little bit about silversmithing, and even took a blacksmithing workshop. I also had a two-year stint as a folk dancer.

PHOTO: Courtesy Valeriya Nakshun

TECH MANAGER SPOTLIGHT JOSH LEVINE

Josh Levine's career in technology began as a research engineer at the University of Washington, where he worked in a lab studying how to improve the fit of prosthetic limbs on amputees. After that experience, he spent 10 years at the U.S. Patent and Trademark Office (USPTO) until joining the Strategic Partnerships Office at NASA, first as a contractor. He converted to a civil servant in 2020 as a technology manager.

"Tech transfer can be more of an art than a science," Levine says. "It's at the intersection so many different fields – economics, business, science, marketing, and more. It's at the nexus of all these things, and that is very exciting because it keeps things fresh."

Levine will work with a diverse portfolio of Goddard innovations, from technologies that enable on-orbit servicing and manufacturing, to instruments that study the solar system. The Innovation Catalyst chatted with Levine virtually to see how he plans to navigate his new role.

WHAT WORK EXPERIENCE DO YOU HAVE THAT PREPARED YOU FOR THIS ROLE?

I have a bachelor's degree in mechanical engineering with a minor in biomedical engineering from the Rose-Hulman Institute of Technology in Terra Haute, Indiana. After that, I spent about a year in Israel, first doing Kibbutz Ulpan, which is a kind of work-study program for learning Hebrew. Then I did a six-month project at Tel Aviv University.

My prosthesis work at the University of Washington lasted for three years. We ran trials with a thermal camera and took thermal images of people wearing their prostheses to see if certain activities had any association with the development of pressure sores. I created some hardware and software for them, and I also ran some experimentation trials with them.

I then spent 10 years at the USPTO as a patent examiner, where I specialized in implants. In many ways, it's an incredible place to work – thousands of examiners give judgement calls to allow patent claims.

I have a lot of respect for the process.

WHY DID YOU CHOOSE TO WORK AT NASA IN TECHNOLOGY TRANSFER?

As a government agency, NASA's technology transfer mission is to populate the commercial marketplace with NASA technology. We want to see technology applications in the commercial realm. Because of that, the focus becomes finding a good match, which is interesting for me as a technology manager.

Furthermore, NASA is a symbol of quality and innovation. Everyone knows NASA's on the cutting edge, and people know when you have something by NASA, it's been developed by really smart people.

WHAT HAVE YOU BEEN UP TO IN YOUR FIRST FEW MONTHS ON THE JOB?

I've been getting familiar with the technology in my portfolio and making decisions about which technologies should move forward for commercialization. I've also started direct marketing, which means that I'm contacting companies and talking to them about specific Goddard technologies they might be interested in licensing. Even if these conversations don't result in a license, it's valuable to talk to companies because they can give feedback on applications or the current state-of-the-art standards.

WHAT IS IT LIKE TO WORK WITH GODDARD'S SCIENTISTS AND ENGINEERS?

For me, it's really fun to talk to an innovator about how their technologies could be used in fields outside their original purpose. So many times, you can see the wheels turning when they realize their innovation isn't quite what they thought it was. In a small way, you get to redefine how they might view their invention and show them how their work has even more impact than it already does.

When you're trying to make a product for market, you assess the market and design the product. NASA does the opposite. That's why innovator participation is so crucial when you're looking for niche markets for a technology. There's a small commitment required to provide documentation, talk to the licensees, and help the licensees to practice the invention. A lot of our innovators on campus do this because they care about the commercialization process and, in the case of an educational license, they enjoy helping students learn about science and engineering.

WHAT'S ONE THING ABOUT TECHNOLOGY TRANSFER THAT YOU THINK EVERYONE SHOULD KNOW?

Tech transfer is a way to show the public that NASA's theoretical science has value even outside of pure research. Our research has value to the companies that want it, and we're contributing to the economy as a whole. If you want a concrete justification for basic research, it's through NASA's licensed technologies that provide value for companies around the country.

From the innovator perspective, I would encourage them to seek out the hidden potential in their technologies. At NASA, we think about innovations on a micro scale, with custom-built solutions for specific missions. At SPO, however, we think about innovations on a macro scale, and we look for applications beyond our missions. Like I said earlier, it's fun when innovators discover that their technology is so much more than they think it is.

For questions about technology licensing or other topics, you can contact Josh Levine via email: joshua.h.levine@nasa.gov.

CODES: 450, 480, 590, 690 + 800

HOW MANY YEARS THEY'VE BEEN AT SPO: 2 years

PHOTO: Courtesy of Josh Levine



